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2013

document version

Early version, also known as pre-print

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citation for published version (APA)

Kourtit, K., Nijkamp, P., & van Leeuwen, E. S. (2013). *New Entrepreneurship in Urban Diasporas in our Modern World*. (Research Memorandum; No. 2013-38). Faculty of Economics and Business Administration.

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New Entrepreneurship in Urban Diasporas in our Modern World

Research Memorandum 2013-38

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New Entrepreneurship in Urban Diasporas in our Modern World

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Abstract

Entrepreneurship among migrants – often called new, migrant or ethnic entrepreneurship – has over the past years become a significant component of the urban economy in many developed countries. Migrant entrepreneurship has a considerable welfare enhancing impact on the city, notably a contribution to innovation and growth, creation of new jobs for less favoured population groups, advancement of benefits from cultural diversity, and reinforcement of economic opportunities related to international connectivity. The present paper aims to investigate the backgrounds of migrant entrepreneurship in large Dutch cities, in particular, the critical success factors of business performance of these entrepreneurs in relation to their ethnic background, their levels of skill, and other specific and general contextual factors. To address the drivers of break-out strategies for new markets, a sample of second-generation Moroccan entrepreneurs is extensively interviewed to extract detailed information at a micro business level. The wealth of qualitative information on both input factors and output (performance) achievements is next systematically coded in a qualitative survey table which is converted into a format that is suitable for application of a rough set analysis. This is an artificial intelligence technique that is able to extract and identify the set of combinations of different drivers that altogether make up for a final outcome. The results show that longer stay in the host country, male gender, family network support and education of the entrepreneurs concerned are critical variables for the business performance of these urban diaspora entrepreneurs.

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Acknowledgement: Financial support from the NORFACE research programme on “Migration in Europe – Social, Economic, Cultural and Policy Dynamics” is acknowledged.

1. The Diaspora Economy

We live in the age of diasporas. More than three per cent of the total world population – about the size of Brazil’s total population – lives nowadays in a different country than where they were born. The foreign migration rate has shown an unprecedented and steady rise in the past decades and, given the rising globalization and increasing mobility, there is no reason to assume that this demographic trend will grind to a halt (OECD, 2009). Consequently, many countries – especially in the developed part of the world – host a great diversity of foreign migrants originating from many sending countries all over the world (The Economist, 2011). This ‘diaspora economy’ exhibits not only a ‘colourful’ ethnic composition in each individual country or city, but leads to world-wide linkages and communications – often even strong international networks – between people in sending and host countries (Zimmerman, 1995). Such international connections may enhance welfare on both sides, through trade, tourism or FDI (Nijkamp et al., 2012a).

Nevertheless, we observe an increasing hostility towards immigrants in the developed world. The main reasons are: (i) expected erosion of the welfare state, (ii) crowding-out effects on local or regional labour markets; (iii) negative externalities (e.g., crime rates) in urban areas. Such arguments call for a strict empirical test from evidence-based research. The general findings from the extensive literature are rather revealing (see also Longhi et al., 2011; Tani, 2003): (i) in many countries there is not a disproportional use of public welfare benefits by immigrants; (ii) crowding-out effects by migrants hardly take place; in most cases even moderately positive effects on local employment and wages can be observed; (iii) negative external effects (e.g. criminality) do occur, but the total social costs are likely rather modest (though annoying). Starting from a broad perspective on migrant behavior, we will in this Introduction gradually zoom in on a specific category of migrants, viz. migrant entrepreneurs.

An important fact is that migrants are not uniformly dispersed in their host country, but have a strong urban orientation (see Body-Gendrot and Martiniello, 2000; Sahin, 2012). As a result, we observe the emergence of urban migrant diasporas which are based on ethnic bonds or social networks, with both negative and positive implications. A balanced assessment of pros and contras calls for a solid conceptual framework in relation to a consistent methodological

foundation. From the many explanatory frameworks, we will use here the study of Nielsen (2004), which distinguishes three such frameworks:

- The *guest worker* model; this is based on a temporary international labour mobility perspective, where foreign migrants – especially low-skilled migrants – are mainly seen as a transitional workforce that will ultimately return to the country of origin.
- The *assimilation* model; this is a political model instigated by the belief that foreigners have to adjust to the local and national identity of the host country in terms of culture and language.
- The *ethnic minority* model; this model takes for granted a multicultural perspective on society, in which cultural diversity is valued as a positive good, without expecting a socio-cultural convergence a priori.

A prominent question is now whether such – conceptual and/or applied – models offer a better understanding of the likely economic and social benefits to the host country. There are numerous studies on the advantages and disadvantages of immigration – and of cultural diversity in a more general sense –, which all point out major differences among and within various migrant groups (see Longhi et al., 2010). This issue has prompted the rise of *migration impact assessment* as a systematic analytical framework for mapping out the relevant direct and indirect consequences for migration for local or national economies (see Nijkamp et al., 2012b).

In a recent study by Christensen et al. (2011) the following categories of (socio-) economic impacts of immigration have been distinguished:

- Contributions to federal, state, and local revenues in the forms of income property, sales, other taxes and fees;
- Contributions to gross domestic product (GDP) in the form of consumer spending;
- Contributions to economic output and national income based on immigrants' influence on labour productivity;
- Contributions to job creation and new business formation.

This wide range of impacts calls for a tailor-made analytical apparatus. In the present study, we will limit ourselves to the latter category, and in particular new business formation. This phenomenon has in the past years received much research and policy attention, and is

known as ‘migrant entrepreneurship’, new entrepreneurship, colourful entrepreneurship, or ‘ethnic entrepreneurship’ (see for an overview Dana, 2007 and Sahin, 2012). Ethnic (or migrant) entrepreneurship has become a characteristic feature of the economic ramification of modern cities in the developed world. Immigrants have been responsible for a high degree of new business formation – and hence economic growth – in many cities of the world. The influx of migrants over the past decades towards the Netherlands has led to a varied ethnic composition of the population, particularly in urban agglomerations. This emerging cultural diversity has – next to several negative externalities – also created a socio-cultural and economic seedbed for new opportunities of less privileged migrant groups. A particularly interesting and promising phenomenon in this context is formed by the emergence of migrant entrepreneurship. Migrant firms have assumed an important share of urban economies in modern agglomerations. It is therefore, important to uncover the backgrounds of their economic success, in particular, their individual motivation structure, the drivers from their business environment (‘contextual factors’), the importance of social bonds or networks and the policy conditions (see for details also Sahin, 2012).

Members of the majority population or host society are usually (self-)employed in modern employment sectors and serve the mainstream market with a mainstream product, but ethnic entrepreneurs are entrenched in ethnic enclaves. According to Portes (1981), ‘enclave entrepreneurs’ are owners of firms in an area where similar enterprises concentrate. Enclave workers are employees of these firms (Wilson and Martin, 1982; Portes and Manning, 1986; Portes and Jensen, 1987). Ethnic enclaves are often not only the main residential areas for ethnic populations, but also the prime locations for their businesses (Zhou 1998, p. 228; Zhou and Logan 1989). Portes (1981) defines ethnic enclaves as immigrant groups which concentrate in a distinct spatial location and organize a variety of enterprises serving their own ethnic market and/or the general population. Their basic characteristic is that a significant proportion of the immigrant labour force works in enterprises owned by other immigrants. On the supply side, the immigrants can benefit from their ethnic resources: social networks, ethnic labour force, and ethnic products. On the demand side, ethnic entrepreneurs serve a predominantly ethnic clientele. However, the opportunity structures for immigrants also develop outside their own ethnic enclaves: and increasingly many entrepreneurs manage to ‘break out’ into the mainstream market which satisfies the needs of the majority of the population.

Our study aims to identify the critical success factors for migrant entrepreneurship by assessing the qualitative impact of personal and contextual factors on the business performance of migrant firms in large cities (with a particular view to the Netherlands). The study is organized as follows. First, we will present some essential features that are decisive for the economic performance of migrant entrepreneurs (Section 2). Then, in Section 3, we will present the database used in our empirical work. Next, a concise introduction to rough set analysis as the qualitative exploratory tool used in our analysis will be given (Section 4). We will then present in Section 5 the empirical results and interpret our findings. Section 6 will offer conclusions.

2. Successful Entrepreneurship in the Diaspora: A Conceptual Model

2.1 Introduction: a conceptual model

Foreign migrants are often characterized by a relatively low educational attainment, and this disadvantage coupled with limited access to the labour market, pushes them into self-employment in marginal positions. The immigrant businesses are thus often concentrated in less attractive and more labour-intensive sectors such as retail, hospitality, catering, etc. As argued by Hermes and Leicht (2010), the more advanced a country's economy, the higher is the self-employment rate of immigrants in traditional sectors.

Young people of ethnic origin are progressing more than ever before in education and the workforce (see Cormack and Niessen, 2002). Many successful self-employed migrants or minority business firms contribute to improved social and economic integration in the host society (see also Migration Policy Group 2002, p. 11). Cultural and socio-psychological attributes of different migrant groups affect their entrepreneurial behaviour. Ethnic minorities may differ in terms of their reasons for migration, their religion, their language, their educational attainment, their demographic background (whether other relatives are in business or not) and their access to family business networks (Basu and Altinay 2002, p. 371).

The aim of the present research is to identify the drivers of successful migrant entrepreneurship in large cities. To that end, we will present and test a conceptual model, (derived from the XXPQP concept (maximum contribution to productivity, quality and profitability; see Kourtiti et al. 2013) that will be translated in an operational measurement model

in the empirical stage of our research. Our conceptual model on business performance of ‘new’ entrepreneurs has the following structure (see Figure 1):

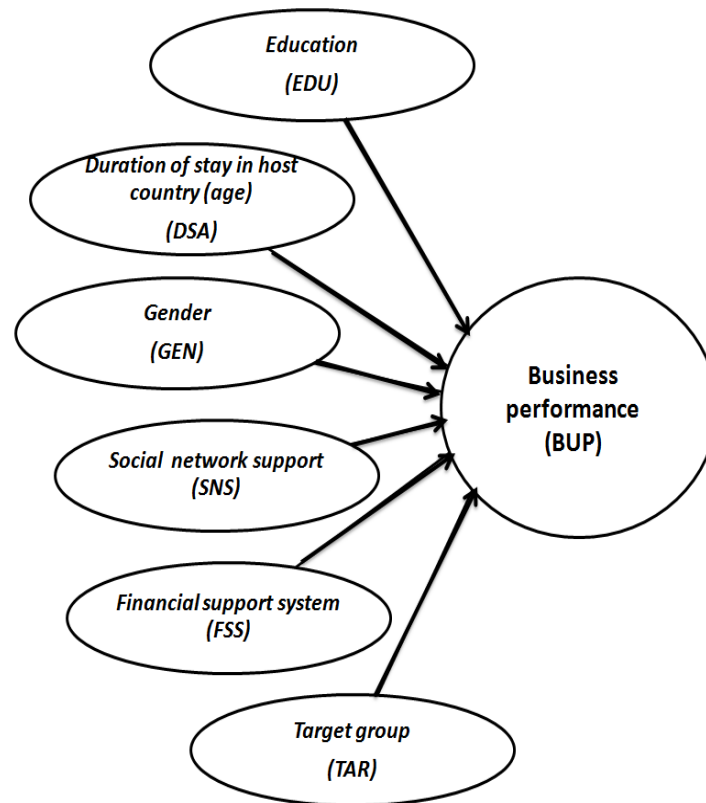


Figure1. A conceptual model for performance assessment of migrant entrepreneurs

We will now briefly outline the elements of this conceptual model (see also Sahin, 2012).

2.2 Education

There is a rich variety of studies on the impact of education on successful migrant business activity. The level of education of these new entrants is a variable for which contrasting results have been obtained. Various studies find that education has a significant impact, but the nature of these impacts appears to vary from study to study. Some find a positive relation, while others find a negative one. Cooper et al., (1987) and Robinson and Sexton (1994) show that the self-employment decision is clearly influenced by educational attainment (Grilo and Thurik 2005, 2006, p. 7, 97). However, a study at the macro level by Uhlaner and Thurik (2004) shows that a higher level of education in a country is accompanied by a lower self-employment rate. It is also

noteworthy that Wit and van Winden (1989) report that education is positively correlated with self-employment in the US, but negatively in the EU (Grilo and Thurik 2006, p. 97). According to Hessels et al. (2005) more highly educated people form a majority of those involved in early-stage entrepreneurial activity in the Netherlands. They also have a more positive perception of setting up their own firm compared to people with a more limited education and are comparatively often active in business services and consumer-oriented sectors.

Migrant minorities consist normally of two types of migrants. One is the first-generation group, consisting of traditional migrants who were directly recruited for employment reasons. This group is often less educated, with most education being achieved in the country of origin. The second group is the next generation, consisting of young dependants born in the host countries, where their entire education has been attained. This group masters the language of the host country better than the first generation does, and is relatively more qualified and acquainted with the local labour market (Retabb 2001, p. 5-6). Following the Dutch statistical definition, we will use the term 'migrants' for both the first and second generation.

2.3 Duration of stay

There are different motivations for different generations of immigrants and consequently, the profile of ethnic people is developing over time. This development is also related to educational opportunities. Chiswick and Miller (1994) found that age at arrival varies negatively with post-immigration educational attainment. They emphasized that the determinant and nature of human capital accumulation after arrival is an important step towards understanding the immigrant's adjustment process. They argue that the age at arrival is the most important determinant to define first-generation and second-generation immigrants and also entrepreneurs in terms of their background. Age here implies entrepreneurial age (the length of time someone conducts a business) and 'business life experience'. Various literature show a significant relationship between entrepreneurial age and 'business life experience', and entrepreneurial success (which requires knowledge of the sector and the experience gathered through occupation) (Meng and Liang 1996; Sahin 2012; Kourtiti and Nijkamp 2012), where firms with specific 'business life experience' are expected outperforming those firms with a lack of such sector specific business life experience (Bruderl et al. 1992; Cooper et al. 1994; van Praag 2003).

Generational dynamics is also contributing to the emergence of new areas of immigrant business activity such as business and professional services, hospitality and entertainment, ICT and creative industries. The second generation is predominantly represented in these newly developing niches like the producer services sector. As a result, the sectoral distribution of the second generation entrepreneurs has become more similar to the native entrepreneurs than the first generation (Rusinovic, 2006, p. 23). While first-generation immigrants may often be seen as ‘forced entrepreneurs’, second-generation immigrants may act more frequently as ‘voluntary entrepreneurs’. The results of recent case study researches (see e.g. Masurel and Nijkamp, 2004; Rusinovic, 2006) show indeed that the younger generation is more open and looks for new opportunities outside the traditional markets. They often have more experience with non-ethnic situations and more often embedded in mainstream markets and formal networks. Therefore, an orientation to non-traditional markets may help especially the younger generation of entrepreneurs in breaking-out strategies.

2.4 Gender

Gender is often found to have a critical impact on entrepreneurship in general (see e.g., Lombard 2001, Lohmann 2001, Cowling and Taylor 2001, Verheul et al. 2001), and on migrant entrepreneurship in particular (Fairlie, 2005). This may have an important impact on risk-taking behaviour, motivations and ambitions of entrepreneurs. For instance, Shane et al. (2003) suggest that self-efficacy and the goal-setting features of an entrepreneur have a great influence on the firm’s performance. Firstly, self-efficacy represents “one’s ability to muster and implement the necessary personal resources, skills, and competencies to attain a certain level of achievement on a given task” (see also Bandura 1997; Shane et al. 2002, 2010). An individual with high self-efficacy for a given task will employ more effort for a greater length of time, persist through setbacks, set and accept higher goals, and develop better plans and strategies for the task (Shane et al. 2003, p 267). In addition, an individual with high self-efficacy will be more tolerant to negative feedback, and will treat it in a more positive manner and eventually use the feedback to improve his/her performance. Another specific motivation is the goal-setting trait. Previous research (see, e.g., Shane et al. 2003) has shown that there is a significant connection between the goals set by the entrepreneurs and the corresponding outcomes.

2.5 Social network support

An important factor in migrant entrepreneurship is formed by *social networks* which are very important for migrant enterprises, since they supply them with resources not available internally. Therefore, these networks provide access to information, financial and physical resources, and human capital (Rath, 2000; Johannisson, 2000; van Delft et al., 2000; Clark and Drinkwater, 2000; Aldrich and Waldinger, 1990). Social networks can be one of the core motives for some migrants to embark on self-employment, and further stay competitive (Boyd, 1989; Sahin, 2012).

Within the entrepreneurship literature, the term ‘network’ is often used to describe the notion of entrepreneurial networks with reference to industrial districts (e.g. Saxenian, 1990), support structures (e.g. Chaston, 1995), and the personal contacts of entrepreneurs (see, e.g., Birley, 1985; Aldrich and Zimmer, 1986). The social network has however, a wider cultural dimension. Culturally-induced values, attitudes and behaviour are of prime importance in explaining the nature of relationships (Littunen 2000, p. 299). Research has highlighted the importance of social networks and networking as an entrepreneurial tool for contributing to the establishment, development and growth of SMEs.

2.6 Financial support systems

Many studies of entrepreneurial and small-firm networks generally highlight the importance of family and friends, particularly during the early phase of entrepreneurial activity. An entrepreneur acts in interaction with the environment, and, when personal networks decrease or increase markedly, it is possible that such changes may also influence the motives, values, attitudes or personal characteristics of an entrepreneur (Littunen 2000, p. 300). Moreover, the family is an important financial and human resource for a migrant entrepreneur as a source for unpaid or underpaid employees (Shoobridge 2006, p. 114). The utilization of family resources makes businesses more successful, and is also associated with long-term growth (Butler, 1991; Upton and Heck, 1997). More specifically, of great interest to our study is the socio-cultural network (the co-ethnic group) of immigrants that plays an important role in shaping an incubation potential for ethnic business. In the literature, the main themes concerning the ethnic social networks are: the relationship with clients, and the labour situation and financial arrangements.

These social networks are thus multifaceted: they provide flexible and efficient possibilities for the recruitment of personnel and the acquisition of capital (Ibrahim and Galt 2003, p. 1108). In general, ethnic businesses rely heavily on labour from the co-ethnic group in general, and the family more specifically. Capital can be more easily borrowed in an informal way. In addition, within the network of ethnic people, certain individuals are used as an informal way of doing business and exchanging information, because there is mutual trust within the network. The use of networks can also form the major bridge into mainstream business development (Masurel et al. 2002; Masurel et al. 2001, p. 5-6). Through their networks of relatives, co-nationals, or co-ethnics, new firms have privileged and flexible access to information, capital, and labour (Kloosterman et al. 1999, p. 256).

2.7 Target group

A final critical success variable that may decisively influence the performance of the new entrepreneurs in urban diasporas is formed by the question whether the firm has a set of explicit target groups of customers that are the focal point of his/her strategy. This relates in particular to the orientation towards ethnic markets, general markets or specific niche markets.

2.8 Business performance

Our conceptual model involves a set of promising critical factors and conditions that may exert a decisive impact on the business performance and its success, in particular financial as well as non-financial achievements (productivity, quality and profitability) of the new generation entrepreneurs in a competitive economic system. In order to stay ahead and remain competitive under various conditions, they have to become very critical and understand where their business performance is today (positioning), and which direction it should take (strategic planning and ambitions). Next, related to clear and transparent business strategies, it is important what targets should be set and how (internal and external) resources should be allocated to achieve relevant business targets and desired goals related to their strategic ambition; this approach encourages entrepreneurs to stay competitive and profitable (see also the '*flying disc*' concept; see Kourtit and Nijkamp, 2012).

Well-educated skills and successful integration in the host community (e.g., being familiar with the host culture, law, regulation, and speak the language fluently) may give them the ability

to be involved in all areas of business activities that leads to a higher business performance in terms of a maximum level of productivity, quality and profitability possible in a challenging and turbulent business environment.

3. Database and Methodology

Migrant entrepreneurship has often started as a low-skilled business in standard ethnic markets, but in recent years we observe more and more break-out strategies, especially by the second generation of migrants. There is as yet limited empirical research and knowledge on market segmentations, risks and conditions, market development strategy, targeting a new markets, behaviour and performance of the second-generation ethnic entrepreneurs. Thus, an extensive data in this field is required in order to enhance meaningful explanations of the emergence and innovative driving forces of this new generation entrepreneurship (Retabb 2001, p. 9).

Our empirical research seeks to explore in particular the backgrounds of migrant entrepreneurship in large Dutch cities, in particular, the critical success factors of business performance of these entrepreneurs in relation to their ethnic background, their levels of skill, and other specific and general contextual factors.

In order to get a better insight into the business achievements and to identify the opportunities and barriers associated with the successful business performance of these firms in the Netherlands, a sample of second-generation Moroccan entrepreneurs with a relatively high educational level and skills, has extensively been interviewed. Such interviews served to extract detailed micro- and meso-information and to get a systematic idea about relevant business characteristics of those Moroccan entrepreneurs who were mainly operating in high-skilled market segments, in particular the innovative and creative sector, such as engineering firms, high-tech, marketing and consultancy firms, in the Netherlands.

The individual firm data set is based on an in-depth survey questionnaire and related to both output and input (quantitative and qualitative) performance and personal characteristics, as well as to motivational and driving forces that are decisive for turning their business into a '*business champion*' in competitive markets, as compared with the same firms or sector in

different regions. Table 1 gives an overview of the input and output variables of Moroccan entrepreneurs.

The wealth of qualitative and quantitative information on both input factors and output (performance) achievements is next systematically coded in a qualitative survey table which is converted into a format that is suitable for application of a new analytical instrument coined rough set analysis (introduced by Pawlak, 1991) to measure the business performance and to judge in an appropriate way the comparative achievement of these migrant entrepreneurs. This is an artificial intelligence technique that is able to extract and identify the set of combinations of different drivers that altogether make up for a final outcome, and map out the relative differences in the business performance of these firms. This approach is particularly useful in cases of ambiguous data and when the data are not convenient for traditional, ordinary statistical methods. This method, which is able to identify and explain their performance, is based on rules of constructs, namely the rough set analysis. This analytical method will be tested on the basis of our sample of Moroccan entrepreneurs in Dutch large metropolitan agglomerations in Section 5.

Table 1. List of input and output indicators of Moroccan entrepreneurs

MAIN CATEGORIES	INDICATOR GROUP	NR	INDICATORS
OUTPUTS: <i>decision variables</i>	Financial business performance (<i>BUP1</i>)	1	<i>Sales</i>
	Financial business performance (<i>BUP2</i>)	2	<i>Profit</i>
	Non-financial business performance (<i>BUP3</i>)	3	<i>Higher quality orientation</i>
INPUTS: <i>condition attributes</i>	Education (<i>EDU</i>)	4	<i>Education level</i>
		5	<i>Education place</i>
	Entrepreneurial age (the length of time someone conducts business) (<i>DSA</i>)	6	<i>Arrival years in the Netherlands</i>
		7	<i>Age</i>
		8	<i>Foundation year of enterprise</i>
	Gender (<i>GEN</i>)	9	<i>Female</i>
		10	<i>Male</i>
	Social network support (<i>SNS</i>)	11	<i>Network participation</i>
		12	<i>Support from social network</i>
	Financial support system (<i>FSS</i>)	13	<i>Formal capital sources</i>
		14	<i>Informal capital resources</i>
	Target group (<i>TAR</i>)	15	<i>Strategic segmentation</i>
		16	<i>Client composition</i>
		17	<i>Sector choice</i>
		18	<i>Diversity in clientele</i>
		19	<i>Number of clientele</i>
		20	<i>Vision and business strategies</i>

4. Rough Set Analysis: A Concise Introduction

Rough Set Analysis can best be understood by comparing it with traditional regression analysis. Regression analysis aims to estimate the quantitative impact of a set of independent quantitative variables (explanatory variables) on a given endogenous variables. The analysis is based on numerically measured variables while the estimation is stochastic in nature and based on a sufficiently large sample. Thus, a proper method to deal with cause-effect relations is the use of a linear regression model, or one of its variants, such as the probit and the logit model. Such models deliver statistical measures of the correlation between a dependent variable and a number of independent or explanatory variables.

However, if the sample of observations is rather small, the reliability of a regression model rapidly breaks down. Moreover, if the variables under consideration do not have a numerical meaning, but only a nominal or categorical meaning (e.g., different colours, gender, etc), a regression analysis is not applicable. In case of categorical information with relatively small samples a rough set analysis – may then be appropriate.

Rough set analysis is a method, which is based on new advances in set theory. This method, rough set analysis, has been described comprehensively by Pawlak (1991). In Slowinski (1991) several applications of the method can be found (see also Van den Bergh et al. 1997). The rough set method is very suitable to analyze qualitative information. This information is considered as a finite set of objects which can be described on the basis of a set of characteristic-attributes. These attributes constitute the available information on the objects (Masurel et al. 2002, p.11).

On the basis of a set attributes we are able to divide the objects into groups. Objects belonging to the same group are indiscernible for an observer. Given his information, an observer cannot make a distinction between objects of the same group. The groups of objects that result from the classification on the basis of all attributes are called elementary sets. If the information on the objects increases, the number of elementary sets will never decrease. A set which is not a union of one or more elementary sets, is called a rough set.

A set is rough, if, given the information (i.e. the attributes) on the objects, an observer is not able to indicate all elements of the set concerned with certainty. He is however, able to

identify all objects that are certainly elements of the set. He is also able to mark the objects that possibly belong to the set. The set of objects that belong with certainty to the rough set, is called the lower approximation of the rough set, while the set of objects that are possibly or certainly elements of the rough set, is called the upper approximation. The ratio of the number of elements belonging to the lower approximation to the number of elements belonging to the upper approximation, is a measure of the accuracy of the approximation.

A rough set analysis can take place in three successive steps. In the first place it is decided which information (input and output) will be included in the analysis. In the second step the information chosen is transformed into a coded information table. For each attribute the data is divided into classes. The third step is the eventual application of the rough set method. Then the so-called reducts of attributes are determined. Each of these reducts is a basis for a minimal decision algorithm on the assignment of objects to sets. In a study by Baaijens and Nijkamp (1997), rough set analysis was applied to a case-study in which the number of attributes was large in proportion to the number of objects. As a result several reducts were found that could serve as a basis for decision algorithms. These decision algorithms were well comprehensible because they did not comprise many (i.e., more than seven) decision rules¹. Such decision rules are normally of a conditional (i.e. ifthen....) nature and indicate also the strength of such conditional statements (i.e., the number of objects for which this statement is true) (see also Baaijens and Nijkamp 1999; Masurel et al. 2002; Masurel and Nijkamp 2009). In our empirical study, the number of objects (i.e., migrant entrepreneurs) and the number of attributes considered is 24 objects and 6 attributes, as outlined in Figure 1 above. We will now present the empirical results of the rough set analysis in Section 5.

5. Rough Set Results

In this section we will present the empirical outcomes of the rough set analysis applied to the performance and conditioning factors of the set of migrant entrepreneurs considered, with the aim to trace which actors may be seen as decisive parameters for the business success of cluster of these entrepreneurs.

¹ The software programme used for the rough set analysis in our study is ROSE, to calculate the basic minimal covering.

5.1 Classification of business performance variables

In the first step, we check which variables are needed to describe the rough set decision rules. We then have to identify the most efficient sets of variables that have the highest explanatory power with the smallest number of variables. Table 2 shows how often each separate variable is included in one of the reducts, the minimal sets of variables. If the score is 100 percent, the variable is called a core variable. Clearly, the choice of the minimal set of reducts, or the most efficient model, is not difficult for the models with the smaller number of classes. For all decision variables, there are only core attributes, with a 100% score.

Table 2. Classification table of dependent variables

		BP1	BP2	BP3
1	DSA (<i>entrepreneurial age: (the length of time someone conducts business)</i>)	100	100	100
2	GEN (<i>gender</i>)	100	100	
3	EDU (<i>education</i>)	100	100	100
4	FSS (<i>financial support system</i>)	100	100	100
5	TAR (<i>target</i>)		100	100
6	SNS (<i>social network support</i>)	100	100	100

Tables 3-8 describe the significant rules and the most important factors that may affect BUP. When formulating the decision rules, we will first present the ones that cover 25% of the cases with a particular score for the decision variable (or dependent variable) (see Tables 3 and 4). Next, we will show the ones with the restriction that 30% of the cases should be included (see Tables 3 and 4). The relevant rules are given in Table 3 and 4, respectively. The above rules suggest that older entrepreneurs often have better scores on the BUP1 variable. Furthermore, it seems that male entrepreneurs score better on BUP1. We will also present the significant rules for BUP2 and BUP3, in Tables 5-6 and 7-8, respectively.

The results of the RSA in Tables 3 and 4 show that the significant rules indicate that entrepreneurial age (the length of time someone conducts business) of the second-generation entrepreneurs often have better scores on the BUP1 variable, because of their (previous) working experience as a student, employee and entrepreneur in the same market segment(s). This means that the general background variable – age– serve as proxy for business life experience and access to networks that affect the success of the individual entrepreneur. The older second-

generation entrepreneurs are more motivated by their own ‘business life experience’, Following Davidsson's (1989, 1990) argument they have access to more financial resources and networks, and trust their own ability to achieve their future strategic goals and objectives. The majority of the second generation entrepreneurs exhibited a sense of confidence in their abilities. Furthermore, it seems that male entrepreneurs score better on BUP1. Research conducted by Sexton and Robinson (1989) argued in their study that females with an ethnic cultural background may have less opportunities to develop relevant ‘business life experiences’. Therefore, they have less access to informal and formal (business) networks to get (business) support and to participate in an action platform and to mobilize crucial resources for the desired growth strategies and personal fulfillment in a challenging and dynamic business environment (see also Fraser, 1995; Wheeler, 1995).

Table 3. Coverage of 25% of cases for BUP1

Rule	#	DSA	GEN	EDU	FSS	SNS	BUP1
		1. Low/ 2. high	0. Female / 1. Male	1. Low / 2. high	1. Own / 2. Family / 4. Bank	1. Yes / 0. NO	1. Low / 2. High / 3. Very high
1	2	1		1			1
2	2		0	1			1
3	2	1	0			1	1
4	2		0		1	1	1
5	2	1	1		1	1	2
6	5	2		1			3
7	6	2			1		3
8	4	2				1	3
9	5		1	1			3
10	6		1		1	0	3

Table 4. Coverage of 30% of cases for BUP1

Rule	#	DSA	GEN	EDU	FSS	SNS	BUP1
		1Low/2high	0Female/1male	1Low/2high	1Own/2family/4bank	1 Yes/0 no	1. Low / 2. High / 3. Very high
1	2	1	1		1		2
2	5	2		1			3
3	6	2			1	1	3
4	5		1	1			3
5	6		1		1	0	3

The RSA findings present in Tables 5 and 6 suggest that the significant rules for BUP2 seem to point to the notion that having no family support and a high education results in high

scores on BUP2. Several previous empirical research studies found that individual educational background of the second generation entrepreneurs, such as higher entrepreneurship education and former work experience, had a strong positive impact on the formation of new ventures and sales growth rates (Fischer et al. 1993; Mazzarol et al., 1999; Sinha 1996; Charney and Libecap 2000; Kourtiti et al. 2012). The new generation of Moroccan entrepreneurs is very well-educated and fully integrated in the Dutch community, and therefore well-prepared to meet business life's challenges and opportunities with a very high level of independent of their family or friends, using their own savings to meet their financial needs.

Table 5. Coverage of 25% of cases for BUP2

Rule	#	DSA	GEN	EDU	TAR	FSS	SNS	BUP2
		1Low/2high	0Female/1male	1Low/2high	1. Yes / 0. NO	1Own/ 2family/ 4bank	1 Yes/0 no	1. Low / 2. High / 3. Very high
1	2	1		1				1
2	2		0	1				1
3	2	1	0				1	1
4	2		0			1	1	1
5	2	2	1	2	0			1
6	1	1	1		1	1		2
7	2	1	1			1	1	2
8	1	1	1		1		1	2
9	1	2		2		1	1	2
10	3		1	2		1	1	2
11	2		1	2	1		1	2
12	1		1		0	1	0	2
13	5	1		2			0	3
14	5			2		1	0	3
15	5			2	1		0	3

Table 6. Coverage of 30% of cases for BUP2

Rule	#	DSA	GEN	EDU	TAR	FSS	SNS	BUP2
		1Low/2high	0Female/1male	1Low/2high	1. Yes / 0. NO	1Own/ 2family/ 4bank	1 Yes/0 no	1. Low / 2. High / 3. Very high
1	1	1	1		1	1		2
2	2	1	1			1	1	2
3	1	1	1		1		1	2
4	1	2		2		1	1	2
5	3		1	2		1	1	2
6	2		1	2	1		1	2
7	1		1		0	1	0	2
8	5	1		2			0	3
9	5			2		1	0	3
10	5			2	1		0	3

Table 7. Coverage of 25% of cases for BUP3

Rule	#	DSA	GEN	EDU	FSS	SNS	BUP3
		1Low/2high	0Female/1male	1Low/2high	1Own/2family/4bank	1 Yes/0 no	1. Low / 2. High / 3. Very high
1	6				1	1	3
2	5			1		1	3

Table 8. Coverage of 30% of cases for BUP3

Rule	#	Age	Education	Target	Capital	Family support	BP3
		1Low/2high	0Female/1male	1Low/2high	1Own/2family/4bank	1 Yes/0 no	1. Low / 2. High / 3. Very high
1	6				1	1	3

However, the RSA results in Tables 7 and 8 show it is evident that for the more qualitative variable BUP3, family support is important, as is having one's own capital, or a clear target group. The majority of the second generation Moroccan entrepreneurs makes extensive use of their own social networks within their own ethnic groups through friendship, family and shared community of origin in their destination areas. This social capital do not interfere in the managerial or operational business activities, they mostly provides them personal, social and business relationships through which they receive access to important information resources and to identify new opportunities to use human and financial capital in order to successfully further their economic and business performance (see also Hisrich and Brush, 1987) in terms of growth, and the provision of higher quality and innovative products and services. Regarding the factors such as capital and information sources, their social networks contribute to the independence of these entrepreneurs, while supporting their personal and human development in a broader societal context.

In general, findings show that a longer entrepreneurial age: (the length of time someone conducts business), male gender, social network support and high educational background of the entrepreneurs in our sample concerned are critical of importance variables for influencing the business performance and success of these urban diaspora entrepreneurs (the entrepreneurs are in a better position and have the ability to be involved in all areas of business activities without personal and financial consequences).

6. Concluding Remarks

In our modern and globalizing urban world, migration flows tend to lead to the emergence of new 'diasporas'. Such concentrations of migrant groups in distinct urban districts prompt the rise of various seedbed conditions for self-employment and entrepreneurship. This paper has made an attempt to trace the success conditions of new entrepreneurs in modern urban diasporas, based on extensive survey questionnaire among Moroccan entrepreneurs in the Netherlands.

Migrant entrepreneurs make up a significant share of the urban business economy and they contribute considerably to urban vitality. Our analysis also shows, however, that – despite the 'signs of hope' offered by migrant entrepreneurship for urban vitality – they do not create an entirely innovative business climate in the urban economy. They are a solid and, in the meantime, established part of the normal urban-economic business sector – and as such are indispensable, but it remains to be seen whether they deserve to be called 'entrepreneurial heroes'. They offer many job opportunities in a modern city, but the 'jump' towards a high-tech sector is still modest. This holds for both first- and second-generation entrepreneurs, although the second generation clearly demonstrates a more knowledge-oriented business attitude. A converging pathway from specific, often ethnic-oriented, market niches to mainstream economic branches is a plausible consequence of the gradual transition of first-generation to second-generation migrant entrepreneurs.

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